

CONSULTING HOURLY RATES BY CATEGORY

Effective July 2000 through June 2001

Project Manager Carlton S. Abbott, FAIA	\$ 175.00
Senior Architects David M. Stemann, AIA Edwin J. Pease, AIA	\$ 96.00
Senior Landscape Architects Wm. Douglas Mettler	\$ 96.00
Architects/Landscape Architects Albert B. Bryan Jane Jacobs	\$ 70.00
Architect/Landscape Architect Intern Stephanie Johnson Christopher Basic	\$ 50.00
Administration/Document Processing/Technicians Laura A. Hance Lynne B. Mettler Robert Crawshaw David Hce Lee	\$ 40.00

HOURLY RATE SCHEDULE

Effective September 1, 2000

<u>CATEGORY</u>	<u>HOURLY</u>	<u>OVERTIME</u>
Principal	\$130.00	Same
Senior Project Manager.....	100.00	Same
Senior Environmental Project Manager	100.00	Same
Senior Land Surveyor.....	100.00	Same
Environmental Project Manager	85.00	Same
Project Manager	85.00	Same
Project Engineer (PE).....	80.00	Same
Project Surveyor (LS).....	80.00	Same
Staff Engineer.....	70.00	Same
Staff Surveyor	70.00	Same
Senior Technician.....	65.00	\$ 97.50
Inspector	60.00	90.00
Senior Landscape Architect/Planner.....	80.00	Same
Certified Landscape Architect.....	65.00	Same
Senior Environmental Scientist.....	75.00	Same
Environmental Scientist II.....	65.00	Same
Environmental Scientist I.....	55.00	Same
Environmental Technician	40.00	60.00
Survey Technician.....	35.00	53.00
Technician II	50.00	75.00
Production Assistant.....	45.00	68.00
Technician I.....	35.00	53.00
Courier.....	25.00	37.50
Survey Party: 2-person.....	80.00	120.00
3-person.....	95.00	143.00

DIRECT EXPENSES

Computer (Automated Drafting and Engineering Calculations)	\$20.00/hour
Mileage (Personal Vehicle).....	0.325/mile
Mileage (Company Vehicle).....	0.35/mile
Photocopies	0.10/page
Color copies.....	1.00/page
Subcontract Automated Plotting	24.00/sheet
Large Format Copies.....	0.11/s.f.
Large Format Scans to File	0.85/s.f.
Mylar	1.70/s.f.
CD Media for Scan to File	5.00/ea.
Miscellaneous expenses	Actual Cost
Subconsultants (soils, architecture, etc.)	Actual Cost + 10%
Fees (review, recordation, permit, etc.)	Actual Cost + 10%

Principal Approval _____
Client Approval _____



Vanasse Hangen Brustlin, Inc.
HOURLY BILLING RATES

Effective July 13, 1998

<u>Billing Code</u>	<u>Labor Category</u>	<u>Hourly Rates</u>
00	Technical Professional 0	\$175.00
01	Technical Professional 1	\$150.00
02	Technical Professional 2	\$130.00
03	Technical Professional 3	\$110.00
04	Technical Professional 4	\$98.00
05	Technical Professional 5	\$94.00
06	Technical Professional 6	\$85.00
07	Technical Professional 7	\$75.00
08	Technical Professional 8	\$65.00
09	Technical Professional 9	\$55.00
10	Technical Professional 10	\$45.00
11	Technical Professional 11	\$40.00
12	Surveyor 1	\$85.00
13	Surveyor 2	\$70.00
14	Surveyor 3	\$60.00
15	Surveyor 4	\$45.00
16	Surveyor 5	\$30.00
17	Designer 1	\$65.00
18	Designer 2	\$55.00
19	Designer 3	\$40.00
20	Designer 4	\$30.00
21	Technician 1	\$40.00
22	Technician 2	\$25.00
23	Document Production	\$45.00
28	Project Administrator	\$50.00
30	Administration	\$50.00
<u>Construction Representatives</u>		
26	Construction Representative 1	\$70.00
27	Construction Representative 2	\$60.00
<u>Court Testimony</u>		
50	Actual Testimony	\$165
50	Preparation Time	\$165

Reimbursable and subconsultant expense to be billed at cost plus 10%.

Hankins & Anderson, Inc.
FY 1999/00 Rate Schedule
Standard Hourly Billing Rates

Classification	Billing Rate
Principal	\$151.00
Project Manager	\$110.00
Quality Control Engineer	\$101.00
Civil Department Head	\$135.00
Civil Sr. Engineer	\$82.00
Civil Jr. Engineer	\$62.00
Civil Technician	\$54.00
Electrical Department Head	\$135.00
Electrical Sr. Engineer	\$96.00
Electrical Jr. Engineer	\$71.00
Electrical Technician	\$51.00
Mechanical Department Head	\$135.00
Mechanical Sr. Engineer	\$97.00
Mechanical Jr. Engineer	\$69.00
Mechanical Technician	\$52.00
Structural Department Head	\$135.00
Structural Sr. Engineer	\$100.00
Structural Jr. Engineer	\$65.00
Structural Technician	\$43.00
Pimbg/FP Department Head	\$96.00
Pimbg/FP Sr. Engineer	\$95.00
Pimbg/FP Jr. Engineer	\$68.00
Pimbg/FP Technician	\$52.00
Const. Admin Dept. Head	\$86.00
Const. Admin Sr. Engineer	\$75.00
Const. Admin Jr. Engineer	\$51.00
CADD Technician	\$51.00
Clerical/Admin	\$44.00

Schnabel Engineering

Schnabel Engineering Associates, Inc.
609 Industry Drive
Hampton, VA 23661-1316
757-827-7207 • Fax 757-838-0995

Richmond, Hampton and Charlottesville, Virginia
SCHEDULE OF PERSONNEL FEES
Effective January 1, 2000

Principal	\$ 135.00/hr
Senior Associate	115.00/hr
Associate	100.00/hr
Senior Engineer/Scientist	80.00/hr
Project Engineer/Scientist	70.00/hr
Senior Staff Engineer/Scientist/Technologist	62.00/hr
Staff Engineer	56.00/hr
Staff Scientist/Technologist	54.00/hr
Senior Technician	48.00/hr
Drafter	40.00/hr
Associate Technician	40.00/hr
Administrative	35.00/hr
Technician II	32.00/hr
Technician I	27.00/hr

NOTES:

1. Engineering fees will be based upon the actual hours charged for personnel times the appropriate hourly rate.
2. Travel by auto to and from jobs will be charged at \$0.38/mile. Travel by air or rail, lodging and meal expense for engineering personnel in the field will be billed at cost with meals and lodging not to exceed \$65.00/day.
3. Typing, reproduction, computer expense, and other miscellaneous expense is usually estimated by a lump sum or a percentage of the total fee in addition to the above hourly rates. Special pickup and delivery expenses will be billed at cost, or at our prevailing hourly and mileage rates for our own personnel.
4. Overtime for Technicians is time for work on Saturday, Sunday, and national holidays, time in excess of 8 hours per day and time between the hours of 7:00 p.m. and 7:00 a.m. A surcharge of \$10/hr is added to the above rate for overtime.
5. Subcontracts for subsurface explorations, bulldozers, surveys, etc. are marked up 15% to cover the cost of handling, insurance and overhead.
6. Field density testing using the sand cone method is included in hourly rates. An additional fee of \$40.00/day will apply for the use of nuclear density equipment.



Abiouness, Cross & Bradshaw, Inc.

Consulting Structural Engineers • Construction Managers

ALFRED E. ABIOUNESS, P.E.
EUGENE L. BRADSHAW, P.E.

HOURLY RATES - JUNE 2000

PRINCIPAL	\$105.00
SENIOR ENGINEER	\$ 75.00
SENIOR PROJECT MANAGER	\$ 75.00
PROJECT ENGINEER	\$ 65.00
ENGINEER	\$ 50.00
CADD	\$ 55.00
INSPECTOR	\$ 50.00 - \$75.00
CLERICAL	\$ 35.00

Archaeological & Cultural Solutions, Inc.

109 Crown Point Road
Williamsburg, Virginia 23185
Business: (757) 561-1156
Fax: (757) 565-4091
Home: (757) 253-2419
email: xkv8rs@aol.com

STANDARD RATE SHEET

Direct Labor

Staff	Rate Per Hour
Principal in Charge	\$64.35
Principal Archaeologist	\$61.88
Curator	\$39.60
Project Manager	\$35.64
Crew Chief	\$25.74
Lab Assistant	\$19.80
Lab Technician	\$15.84
Field Archaeologist	\$19.80
Field Technician	\$15.84
Clerical	\$19.80

Direct Expenses

Mileage	\$0.31 per mile
Travel	At cost
Copying	\$0.05 per copy
Subcontractors	At cost

All purchased services are billed at cost plus 10% handling fee.

NOTES:

1. Invoices are submitted monthly and are payable within 30 days. Late payments incur a late charge of 1.5% per month. ACS reserves the right to discontinue work if invoices are not paid within 30 days.
2. Information on this rate schedule, and any attached proposal, is confidential and shall not be disclosed. It may be used only for evaluation purposes.

**FES STANDARD-UNIT RATE FEE SCHEDULE
GEOTECHNICAL ENGINEERING,
MATERIALS TESTING AND INSPECTION SERVICES
ANNUAL CONTRACT**

SUBSURFACE SOIL INVESTIGATION

1. Soil borings and samples shall be in accordance with ASTM D1586 (latest revision) except that the standard penetration and sampling shall be continuous for the initial ten (10) feet in each boring (except in water) and every five (5) feet thereafter.
2. Each sample shall be visually classified in the field by the driller in accordance with Unified Soil Classification System (USCS). The field description shall be verified by laboratory classification. All samples shall be sorted into groups according to visual similarities and a representative sample of each group shall be classified in accordance with the Unified Soils Classification System (USCS).
3. All samples obtained within six (6) feet of the surface and above the free water level from all borings shall have a natural moisture content determination.
4. Other tests as outlined below, may be used as required for a period of one (1) year with two (2) consecutive renewal terms. A unit price for tests will be established in the annual contract.

DESCRIPTION OF TESTS	UNIT PRICE
1. Mobilization/Demobilization Truck (mounted)	<u>\$300.00/trip</u>
All Terrain (mounted)	<u>\$500.00/trip</u>
Barge (mounted)	<u>\$7,500.00/trip</u>
2. Special Costs	
a. Utility Clearance Coordination	<u>\$ 70.00/hour</u>
b. Dozer for clearing	<u>\$ 95.00/hour</u>
c. Floating equipment for overboard drilling (barge for shallow water-in shore) (3 day minimum)	<u>\$3500.00/day</u>
d. Core and patch concrete/asphalt	<u>\$ 20.00/each</u>
3. Soil borings per linear foot per ASTM D1586	
a. On land	
0 – 50 feet	<u>\$ 8.00/ft</u>
50 – 70 feet	<u>\$10.00/ft</u>
70 – 90 feet	<u>\$12.00/ft</u>
90 – 100 feet	<u>\$15.00/ft</u>

*FES STANDARD UNIT RATE F. SCHEDULE
GEOTECHNICAL ENGINEERING,
MATERIALS TESTING AND INSPECTION SERVICES
ANNUAL CONTRACT*

b.	Over water	
	Top of casing – 50 feet	<u>\$10.00/ft</u>
	50 – 70 feet	<u>\$14.00/ft</u>
	70 – 90 feet	<u>\$16.00/ft</u>
	90 – 100 feet	<u>\$25.00/ft</u>
4.	Drill Crew per hour (clients caused stand-by)	
	On land	<u>\$200.00/hour</u>
	On water	<u>\$300.00/hour</u>
5.	Obtaining undisturbed samples D1587 shelly tube (including sample extractions)	
a.	On land	<u>\$150.00/sample</u>
b.	On water	<u>\$250.00/sample</u>

LABORATORY TESTING

6.	Sample Classification D2487	
a.	Natural Moisture Content Determination D2216	<u>\$10.00/test</u>
b.	Sieve Analysis (no hydrometer)	<u>\$30.00/test</u>
c.	Atterberg Limits ASTM D425, D423	<u>\$60.00/test</u>
d.	Specific Gravity	<u>\$30.00/test</u>
e.	Organic Content	<u>\$40.00/test</u>
f.	Prisms and Cubes	<u>\$10.00/test</u>
7.	Triaxial Test	
a.	Unconsolidated-Undrained D2850	<u>\$250.00/pt</u>
b.	Consolidated-Undrained (measuring pore pressure)	<u>\$350.00/pt</u>
8.	Consolidation Test D2435 (6 points min.)	<u>\$450.00/test</u>
9.	Moisture-Density Relations (proctor test)	
a.	ASTM D-698 (STD)	<u>\$75.00/test</u>
b.	ASTM D-1557 (MOD)	<u>\$90.00/test</u>
10.	In-Place Density	
a.	Sand Cone ASTM D1556	<u>\$30.00/test</u>
b.	Rubber Balloon ASTM D2167	<u>\$30.00/test</u>
c.	Nuclear ASTM D2922	<u>\$30.00/test</u>
11.	CBR ASTM D1883 (2 point: Soaked-Unsoaked at 1 Compactive effort)	<u>\$15.00/test</u>

MATERIALS TESTING AND INSPECTION

The non-professional services hereunder shall consist of performing field investigation and testing, and laboratory tests and analysis in accordance with ASTM practices, in the quantities and at the unit price established.

DESCRIPTION OF TESTS AND INSPECTIONS	UNIT PRICE
1. Concrete Test Cylinders	
a. Concrete test cylinders 6 x 12 inches cure, test and report ASTM C39, per cylinder minimum three (3) cylinders per set. Molded by Laboratory	<u>\$10.00/cyl.</u>
Molded by Others	<u>\$25.00/cyl.</u>
2. Concrete Test Beams ASTM C78	<u>\$50.00/break</u>
3. Aggregates or Sub-base/Base Course Materials (ASTM D487)	
a. Gradation Analysis ASTM D422 (hydrometer) ASTM C136 (sieves) combination with graph	<u>\$ 80.00/test</u>
4. Asphaltic Concrete Aggregate Gradation	<u>\$125.00/test</u>
5. Fine Aggregate Test for organic impurities (ASTM C40)	<u>\$ 40.00/test</u>
6. Test Compressive Strength of Lightweight Insulating Concrete	
a. 3 x 6 inch (ASTM C495)	<u>\$ 10.00/cyl</u>
b. Cut, remove, trim, and test samples of hardened lightweight concrete (2 to 4 inch cubes) in accordance with ASTM C513	<u>\$50.00/test</u>
7. Concrete Masomry Units (CMU), ASTM C140, Test for compressive strength, absorption and Moisture content (minimum 2 blocks)	<u>\$250.00/blk</u>
8. Specific gravity or density of Cored Asphaltic Concrete Samples, rip-rap, concrete sections, coarse aggregate, etc. by ASTM C127.	<u>\$ 50.00/each</u>
9. Compaction density testing in accordance with ASTM D2922 Method.	
a. Services of technician (min. of 3 hours)	<u>\$30.00/hour</u>
b. Saturdays, Sundays or Holidays or over 8 hours in any one (1) day or before 7:30 AM or after 4:30 PM	<u>\$35.00/hour</u>
c. Mileage	<u>\$ 0.40/mile</u>

*FES STANDARD UNIT RATE F SCHEDULE
 GEOTECHNICAL ENGINEERING,
 MATERIALS TESTING AND INSPECTION SERVICES
 ANNUAL CONTRACT*

FES

10. Services of qualified concrete technician at the job site to perform air entrainment tests on concrete in accordance with ASTM C231 (includes slump, unit weight, temperature and making of test cylinders)
 - a. Services of technician (minimum of 3 hours) \$30.00/hour
 - b. Services of technician Saturdays, Sundays, Holidays or time in excess of 8 hours in any one day or before 7:30 AM or after 4:30 PM \$35.00/hour
 - c. Mileage \$ 0.40/mile

11. Services of Qualified and Certified Asphalt Technician at job site (or contractor's plant) to perform inspection and standard field control tests required for asphalt, concrete, and soils for construction.
 - a. Services of technician (minimum of 3 hours) \$30.00/hour
 - b. Services of technician Saturdays, Sundays, Holidays or time in excess of 8 hours in any one day or before 7:30 AM or after 4:30 PM \$35.00/hour
 - c. Mileage \$ 0.40/mile

12. Inspection of Unit Masonry Typical work shall include:
 Quality & Testing of Masonry units & materials for mortar & grout.
 Proportioning, mixing and consistency of mortar & grout.
 Condition, sizing, spacing & placement of reinforcement.
 General progress of work.
 Special provisions <40deg. >100deg.
 Records of inspections
 - a. Services of Unit Masonry inspector, per hour \$30.00/hour
 - b. Services of technician Saturdays, Sundays, Holidays or time in excess of 8 hours in any one day or before 7:30 AM or after 4:30 PM \$35.00/hour
 - c. Mileage \$ 0.40/mile

13. Testing of concrete cores for compressive strength,
 Nondestructive testing of concrete.

Technician w/spring driven hammer, per hour	<u>\$45.00/hour</u>
Technician w/windsor probe system, per hour	<u>\$45.00/hour</u>
Technician w/rebar meter, per hour	<u>\$45.00/hour</u>
Technician w/ultrasonic equipment per hour	<u>\$45.00/hour</u>
(2) Technicians to perform radiographic inspection, per hour	<u>\$90.00/hour</u>

14. Concrete coring (ASTM C42) and testing
 - a. Cut core samples (includes equipment and technicians at job site) \$3.00/inch

dia. X inch length

*FES STANDARD UNIT RATE FEE SCHEDULE
 GEOTECHNICAL ENGINEERING,
 MATERIALS TESTING AND INSPECTION SERVICES
 ANNUAL CONTRACT*

FES

b.	Test core samples	<u>\$25.00 sample</u>
c.	Saw trimming	<u>\$50.00/each</u>
15.	Non-Destructive Testing of Steel, up to 3 inch thick in accordance with AWS D1.1	
a.	Reprographic (2-man crew)	<u>\$90.00/hour</u>
1.	5 x 7 inch film	<u>\$15.00/film</u>
2.	8 x 10 inch film	<u>\$20.00/film</u>
3.	4.5 x 10 inch film	<u>\$20.00/film</u>
4.	4.5 x 17 inch film	<u>\$40.00/film</u>
5.	14 x 17 inch film	<u>\$50.00/film</u>
b.	Ultrasonic ASTM E164 (1 man)	<u>\$45.00/hour</u>
c.	Magnetic particle (2-man crew)	<u>\$90.00/hour</u>
d.	Liquid Penetrant (1 man)	<u>\$45.00/hour</u>
e.	Visual inspection and report (1 certified welding/inspector) Services of technician Saturdays, Sundays, Holidays or time in excess of 8 hours in any one day or before 7:30 AM or after 4:30 PM	<u>\$45.00/hour</u> <u>\$60.00/hour</u>
f.	Mileage	<u>\$ 0.40/mile</u>
16.	Roofing Tests	
a.	Built-up roof test cuts and laboratory analysis, minimum of 3 (ASTM D3617 or D2829)	<u>\$100.00/each</u>
b.	Services of a qualified Roofing Technician to perform Moisture survey (using nuclear moisture gauge) or other on-site tests and inspections (minimum of 3 hours)	
1.	Services of technician	<u>\$45.00/hour</u>
2.	Services on Saturday, Sunday or Holidays, Time in excess of 8 hours/day or prior to 7:30 AM or after 4:30 PM	<u>\$60.00/hour</u>
3.	Equipment charge for nuclear moisture meter	<u>\$25.00/day</u>
c.	Mileage	<u>\$ 0.40/mile</u>
17.	Pile Driving	
a.	Services of a qualified Engineer to compute wave equation analysis using blow count records	<u>\$70.00/hour</u> (each pile)
b.	WAVE Equation Evaluation (1 soil/1 length)	<u>\$350.00/each</u>
c.	PDA Equipment Fee (day of driving)	<u>\$800.00/day</u>
d.	Field Engineer to operate PDA Equipment	<u>\$600.00/day</u>
e.	CAPWAP Analysis of selected re-strike blow	<u>\$500.00/each</u>
f.	Dynamic Pile Analysis (PDA) Report	<u>\$750.00/each</u>
g.	Mobilization of equipment (day of driving)	<u>\$250.00/LS</u>

- h. Owner to provide power on-site unless otherwise noted, along with appropriate access to test pile locations.
- i. Damaged gauges and equipment will be billed to the contractor at cost.

Inspection/Testing of Structural Steel

Source Quality Control;

Shop Inspections/Testing at the fabrication site, specifically shop welds and bolted connections, RCSC's Specifications and ASTM. Prepare test reports.

- a. Services of Structural Steel Inspector, per hour (at Fab Shop) \$70.00/hour
- b. Test shop bolted connection per RCSC's specification, \$45.00/hour
- c. Test shop welds per AWS D1.1 \$45.00/hour
- d. Mileage \$ 0.40/mile

18. Additional bend tests on shear connectors, per AWS D1.1 \$100.00/each

19. Field Quality Control:

Field Inspections/Testing at the erection site, specifically field welds & bolted connections. AWS D1.1 and RCSC's "Specifications for Structural Joints using ASTM A 325 or ASTM A490 bolts", prepare test reports. Services of Structural Steel Inspector.

- a. Test field bolted connections per RCSC's specifications, \$45.00/hour
- b. Test field welds per AWS D1.1, \$45.00/hour
- c. Additional tests on field welded shear connectors in accordance with AWS D1.1 for stud welding, \$45.00/hour
- d. Inspection/Testing of Steel Joists & Deck, services of welding/bolting inspector \$45.00/hour

20. Inspection/Testing of Engineered Roof Deck Assembly, Structural Engineer \$85.00/hour

PROFESSIONAL STAFF

21. Professional services to include; footing bearing inspection, pile installation inspection, proof roll, structural steel inspection, meetings, value engineering, and other related engineering services required.

- a. Senior Engineer \$85.00/hour
- b. Structural Engineer \$85.00/hour
- c. Project Engineer \$70.00/hour
- d. Senior Technician \$45.00/hour
- e. Draftsman \$45.00/hour
- f. Secretarial \$35.00/hour

**FES 2000 STANDARD UNIT FEE SCHEDULE
DRILLING SERVICES**

Field Exploration

1. Mobilization of Drill Rig and Crew (Truck Mounted)	\$300.00 per trip
2. Mobilization of Drill Rig Crews (All-Terrain Vehicle)	\$500.00 per trip
3. Access Clearing (Men and Equipment)	\$ 95.00 per hour
4. Bulk Sample Collection and Utility Clearance	\$ 60.00 per hour
5. Standard Penetration Test (SPT) Borings	
0 - 50 Feet Depth	\$ 8.00 per L.F.
50 -100 Feet Depth	\$ 13.00 per L.F.
6. Auger Borings 0- 50 Feet Depth	\$ 7.00 per L.F.
7. Permeability	\$ 350.00 each
8. Undisturbed Shelby Tube Sample	\$ 100.00 each
9. Split Spoon Samples Extra	\$ 25.00 each
10. Grout Seal Boreholes	\$ 5.00 per L.F.
11. Standby Time (Drill Rig and Crew)	\$ 150.00 per hour
12. Asphalt & Concrete Patch	\$ 20.00 Each

Project sites that require specialized drilling equipment, rock drilling or drilling from a barge will be quoted upon request.

Miscellaneous

1. Mileage	\$1.00 per mile
2. Additional Reports	\$50.00 each

Notes

1. Overtime rates will be billed at 1 30 times the regular hourly rates. Overtime will be billed for work performed in excess of eight (8) hours per day, night work (6 pm to 6 am), weekends and holidays. All services include one original and one copy of report to client.
2. Other services will be quoted upon request. Please note FES can perform geotechnical and environmental drilling, geotechnical engineering [foundation explorations for projects such as residential structures, commercial (low and high-rise), public, bridges, roadways, retaining walls, embankments, cut and fill slopes, storm water management ponds, dams, landfill sites, waste water treatment sites and distressed foundation problems) and environmental management.
3. FES is certified by Virginia Department of Transportation (VDOT) as a Disadvantaged Business Enterprise (DBE) for Federal-Aid projects and a Women Owned Business Enterprise (WBE) for State projects. FES currently has offices in Newport News, Richmond, Virginia Beach and Williamsburg, Virginia.
4. Foundation Engineering Science, Inc. (FES) is certified by the U. S. Army Corps. of Engineers to perform soil and concrete testing in the field and laboratory.